

# Biotic and abiotic structure and function of an ecosystem

[Environment](#), [Ecology](#)



In this assignment, you will investigate the biotic and abiotic structure and function of an ecosystem. Choose one of the following ecosystems:

- Tropical rainforest.
- Grassland.
- Coral Reef.
- Estuary.
- Desert.

You will write a two to three page APA-style research paper about your choice of ecosystem including: Where might this type of ecosystem be located? Give one specific example. Describe the structure of the ecosystem: List both the abiotic components and biotic components Describe the function of the ecosystem: How do the abiotic and biotic components interact in biogeochemical cycles? Describe both the carbon and nitrogen cycles Describe disturbance and recovery: Describe one natural and one human caused disturbance to the ecosystem. Explain the damage to the ecosystem, including how the abiotic and biotic characteristics of the ecosystem changed. Explain how ecosystems recover naturally based on resilience mechanisms and the theory of secondary succession. The following grading rubric will be used for this assignment.

### **Grading Rubric**

APA	Style	5%
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Where might this type of ecosystem be located? Give one specific example  
20%

Describe the structure: 40%

Abiotic components: 10%

Biotic Components 10%

Describe the function:

Describe the Carbon cycle: 15%

Describe the Nitrogen cycle: 15%

Disturbance and Recovery:

Example of natural disturbance event and changes to the ecosystem.

Discussion of recovery process: 15% Example of anthropogenic caused disturbance event and changes to the ecosystem.

Discussion of recovery process. 15% Explain how ecosystems recover naturally based on resilience mechanisms and the theory of secondary succession.